

Author Index to Volume 22

- Ackleson, S. G.: Remote Sensing of Submerged Aquatic Vegetation in Lower Chesapeake Bay: A Comparison of Landsat MSS to TM Imagery, 235
- Alaniz, M. A.: *See* Everitt, J. H.
- Barale, V.: Remote Observations of the Marine Environment: Spatial Heterogeneity of the Mesoscale Ocean Color Field in CZCS Imagery of California Near-Coastal Waters, 173
- Baret, F., Champion, I., Guyot, G., and Podaire, A.: Monitoring Wheat Canopies with a High Spectral Resolution Radiometer, 367
- Biggar, S. F.: *See* Jackson, R. D.
- Biggar, S. F.: *See* Slater, P. N.
- Bredow, J.: *See* Zoughi, R.
- Carleton, A. M.: Satellite-Derived Attributes of Cloud Vortex Systems and Their Application to Climate Studies, 271
- Champion, I.: *See* Baret, F.
- Choudhury, B. J.: Relationships Between Vegetation Indices, Radiation Absorption, and Net Photosynthesis Evaluated by a Sensitivity Analysis, 209
- Connors, K. F., Gardner, T. W., and Petersen, G. W.: Classification of Geomorphic Features and Landscape Stability in Northwestern New Mexico Using Simulated Spot Imagery, 187
- Davis, M. R.: *See* Everitt, J. H.
- Escobar, D. E.: *See* Everitt, J. H.
- Everitt, J. H., Escobar, D. E., Alaniz, M. A., and Davis, M. R.: Using Airborne Middle-Infrared (1.45-2.0 μm) and Video Imagery for Distinguishing Plant Species and Soil Conditions, 423
- Frouin, R. and Gautier, C.: Calibration and NOAA-7 AVHRR, GOES-5, and GOES-6 VISSR/VAS Solar Channels, 73
- Gardner, T. W.: *See* Connors, K. F.
- Gautier, C.: *See* Frouin, R.
- Geist, J.: Recent Improvements in Radiometric Accuracy Based on New Detector Technology, 127
- Gillespie, A. R., Kahle, A. B., and Walker, R. E.: Color Enhancement of Highly Correlated Images. II. Channel Ratio and "Chromaticity" Transformation Techniques, 343
- Gordon, H. R.: Calibration Requirements and Methodology from Remote Sensors Viewing the Ocean in the Visible, 103
- Grant, L.: Diffuse and Specular Characteristics of Leaf Reflectance, 309
- Guenther, B.: Practical Aspects of Achieving Accurate Radiometric Field Measurements, 131
- Guyot, G.: *See* Baret, F.
- Holm, R. G.: *See* Slater, P. N.
- Huh, O. K. and Shim, T.: Satellite Observations of Surface Temperatures and Flow Patterns, Sea of Japan and East China Sea, Late March 1979, 379
- Hunt, E. R., Jr., Rock, B. N., and Nobel, P. S.: Measurement of Leaf Relative Water Content by Infrared Reflectance, 429
- Jackson, R. D.: *See* Slater, P. N.
- Jackson, R. D., Moran, M. S., Slater, P. N., and Biggar, S. F.: Field Calibration of Reference Reflectance Panels, 145
- Kahle, A. B.: *See* Gillespie, A. R.
- Kidder, S. Q.: A Multispectral Study of St. Louis Area Under Under Snow-Covered Conditions Using NOAA-7 AVHRR Data, 159
- Lathrop, R. G., Jr. and Lillesand, T. M.: Calibration of Thematic Mapper Thermal Data for Water Surface Temperature Mapping: Case Study on the Great Lakes, 297
- Lillesand, T. M.: *See* Lathrop, R. G., Jr.

- Mao, Y.: *See* Slater, P. N.
- Markham, B. L. and Barker, J. L.: Radiometric Properties of U.S. Processed Landsat MSS Data, 39
- Moore, R. K.: *See* Zoughi, R.
- Moran, M. S.: *See* Jackson, R. D.
- Moran, M. S.: *See* Slater, P. N.
- Murphy, R. E.: *See* Vukovich, F. M.
- Nobel, P. S.: *See* Hunt, E. R.
- Palmer, J. M.: *See* Slater, P. N.
- Paris, J. F.: *See* Westman, W. E.
- Petersen, G. W.: *See* Connors, K. F.
- Peterson, D. L., Spanner, M. A., Running, S. W., and Tueber, K. B.: Relationship of Thematic Mapper Simulator Data to Leaf Area Index of Temperate Coniferous Forests, 323
- Podaire, A.: *See* Baret, F.
- Price, J. C.: Radiometric Calibration of Satellite Sensors in the Visible and Near Infrared: History and Outlook, 3
- Rock, B. N.: *See* Hunt, E. R.
- Running, S. W.: *See* Peterson, D. L.
- Shim, T.: *See* Huh, O. K.
- Slater, P. N.: *See* Jackson, R. D.
- Slater, P. N., Biggar, S. F., Holm, R. G., Jackson, R. D., Mao, Y., Moran, M. S., Palmer, J. M., and Yuan B.: Reflectance and Radiance-Based Methods for the In-Flight Absolute Calibration of Multispectral Sensors, 11
- Spanner, M. A.: *See* Peterson, D. L.
- Teuber, K. B.: *See* Peterson, D. L.
- Toll, D. L.: *See* Vukovich, F. M.
- Vukovich, F. M., Toll, D. L., and Murphy, R. E.: Surface Temperature and Albedo Relationships in Senegal Derived from NOAA-7 Satellite Data, 413
- Walker, R. E.: *See* Gillespie, A. R.
- Westman, W. E. and Paris, J. F.: Detecting Forest Structure and Biomass with C-Band Multipolarization Radar: Physical Model and Field Tests, 249
- Yuan, B.: *See* Slater, P. N.
- Zoughi, R., Bredow, J., and Moore, R. K.: Evaluation and Comparison of Dominant Backscattering Sources at 10 GHz in Two Treatments of Tall-Grass Prairie, 395

Subject Index to Volume 22

Albedo

Surface Temperature and Albedo Relationships in Senegal Derived from NOAA-7 Satellite Data, F. M. Vukovich, D. L. Toll, and R. E. Murphy, 413

Aerial Video

Using Airborne Middle-Infrared (1.45–2.0 μm) Video Imagery for Distinguishing Plant Species and Soil Conditions, J. H. Everitt, D. E. Escobar, M. A. Alaniz, and M. R. Davis, 423

Aquatic Vegetation

Remote Sensing of Submerged Aquatic Vegetation in Lower Chesapeake Bay: A Comparison of Landsat MSS to TM Imagery, S. G. Ackleson and V. Klemas, 235

AVHRR

Calibration and NOAA-7 AVHRR, GOES-5, and GOES-6 VISSR/VAS Solar Channels, R. Frouin and C. Gautier, 73

A Multispectral Study of the St. Louis Area Under Snow-Covered Conditions Using NOAA-7 AVHRR Data, S. Q. Kidder, 159

Surface Temperature and Albedo Relationships in Senegal Derived from NOAA-7 Satellite Data, F. M. Vukovich, D. L. Toll, and R. E. Murphy, 413

Canopy Radiation Modeling

Relationships Between Vegetation Indices, Radiation Absorption, and Net Photosynthesis Evaluated by a Sensitivity Analysis, B. J. Choudhury, 209

Crop Monitoring

Monitoring Wheat Canopies with a High Spectral Resolution Radiometer, F. Baret, I. Champion, G. Guyot, and A. Podaire, 367

Cloud Systems

Satellite-Derived Attributes of Cloud Vortex Systems and Their Application to Climate Studies, A. M. Carleton, 271

CZCS Imagery

Remote Observations of the Marine Environment: Spatial Heterogeneity of the Mesoscale Ocean Color Field in CZCS Imagery of California Near-Coastal Waters, V. Barale, 173

Forest Canopy Structure

Detecting Forest Structure and Biomass with C-Band Multipolarization Radar: Physical Model and Field Tests, W. E. Westman and J. F. Paris, 249

Relationship of Thematic Mapper Simulator Data to Leaf Area Index of Temperate Coniferous Forests, D. L. Peterson, M. A. Spanner, S. W. Running, and K. B. Teuber, 323

Geomorphology

Classification of Geomorphic Features and Landscape Stability in Northwestern New Mexico Using Simulated Spot Imagery, K. F. Connors, T. W. Gardner, and G. W. Petersen, 187

Image Enhancement

Color Enhancement of Highly Correlated Images. II. Channel Ratio of "Chromaticity" Transformation Techniques, A. R. Gillespie, A. B. Kahle, and R. E. Walker, 343

Landsat Calibration

Calibration of Thematic Mapper Thermal Data for Water Surface Temperature Mapping: Case Study on the Great Lakes, R. G. Lathrop, Jr. and T. M. Lillesand, 297

Radiometric Properties of U.S. Processed Landsat MSS Data, B. L. Markham and J. L. Barker, 39

Leaf Area Index Estimation

Relationships Between Vegetation Indices, Radiation Absorption and Net Photosynthesis Evaluated by a Sensitivity Analysis, B. J. Choudhury, 209

Relationship of Thematic Mapper Simulator Data to Leaf Area Index of Temperate Coniferous Forests, D. L. Peterson, M. A. Spanner, S. W. Running, and K. B. Teuber, 323

Ocean Color Mapping

Remote Observations of the Marine Environment: Spatial Heterogeneity of the Mesoscale Ocean Color Field in CZCS Imagery of California Near-Coastal Waters, V. Barale, 173

Radar Backscatter

Evaluation and Comparison of Dominant Backscattering Sources at 10 GHz in Two Treatments of Tall-Grass Prairie, R. Zoughi, J. Bredow, and R. K. Moore, 395

Radiometric Calibration

Calibration and NOAA-7 AVHRR, GOES-5, and GOES-6 VISSR/VAS Solar Channels, R. Frouin and C. Gautier, 73

Calibration Requirements and Methodology for Remote Sensors Viewing the Ocean in the Visible, H. R. Gordon, 103

Field Calibration of Reference Reflectance Panels, R. D. Jackson, S. Moran, P. N. Slater, and S. F. Biggar, 145

Practical Aspects of Achieving Accurate Radiometric Field Measurements, B. Guenther, 131

Radiometric Calibration of Satellite Sensors in the Visible and Near Infrared: History and Outlook, J. C. Price, 3

Radiometric Properties of U.S. Processed Landsat MSS Data, B. L. Markham and J. L. Barker, 39

Recent Improvements in Radiometric Accuracy Based on New Detector Technology, J. Geist, 127

Reflectance and Radiance-Based Methods for the In-Flight Absolute Calibration of Multispectral

Sensors, P. N. Slater, S. F. Biggar, R. G. Holm, R. D. Jackson, Y. Mao, M. S. Moran, J. M. Palmer, and B. Yuan, 11

Sea Surface Flow

Satellite Observations of Surface Temperature and Flow Patterns, Sea of Japan and East China Sea, Late March 1979, O. K. Huh and T. Shim, 379

Surface Temperature

Satellite Observations of Surface Temperature and Flow Patterns, Sea of Japan and East China Sea, Late March 1979, O. K. Huh and T. Shim, 379

Thematic Mapper

Relationship of Thematic Mapper Simulator Data to Leaf Area Index of Temperate Coniferous Forests, D. L. Peterson, M. A. Spanner, S. W. Running, and K. B. Teuber, 323

Thermal Mapping

Calibration of Thematic Mapper Thermal Data for Water Surface Temperature Mapping: Case Study on the Great Lakes, R. G. Lathrop, Jr. and T. M. Lillesand, 297

Urban Analysis

A Multispectral Study of the St. Louis Area Under Snow-Covered Conditions Using NOAA-7 AVHRR Data, S. Q. Kidder, 159

Vegetation Reflectance

Diffuse and Specular Characteristics of Leaf Reflectance, L. Grant, 309

Measurement of Leaf Relative Water Content by Infrared Reflectance, E. R. Hunt, Jr., B. N. Rock, and P. S. Nobel, 429

Monitoring Wheat Canopies with a High Spectral Resolution Radiometer, F. Baret, I. Champion, G. Guyot, and A. Podaire, 367

Relationship of Thematic Mapper Simulator Data to Leaf Index of Temperate Coniferous Forests, D. L. Peterson, M. A. Spanner, S. W. Running, and K. B. Teuber, 323